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Seabron Adamson

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EXAMINER

BORLINGHAUS, JASON M

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/034,294	Applicant(s) ADAMSON, SEABRON	
	Examiner JASON M. BORLINGHAUS	Art Unit 3693	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4, 6, 8, 11 – 14 and 34 - 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4, 6, 8, 11 – 14 and 34 - 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/28/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Requirement for Information

Examiner acknowledges receipt of non-patent literature from the Applicant in satisfaction of the Requirement for Information issued in the Office Action mailed on 6/29/07.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 claims dependency based upon Claim 5, a claim which currently stands as cancelled. Examiner assumes for purposes of examination that Applicant intended to claim dependency based upon Claim 34, an independent claim, which would bring Claim 6 in line with the amended language of claims 4, 8, 11, 13 and 14.

Claim 8 claims “the said received offer made by the said at least one market participant to buy **and** sell a new point-to-point transmission right” (emphasis added). Shouldn't the offer be to buy **or** sell, not buy **and** sell?

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4, 6, 8, 11 – 14 and 34 - 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuck (US Patent 6,115,698) in view of Hogan (Hogan W. Flowgate Rights and Wrongs. August 20, 2000. pp. 1 – 49).

Regarding Claims 4, 6, 8, 11 – 14 and 34, Tuck discloses method for trading electrical transmission rights, comprising:

(a) receiving, from a market participant (utility companies), an offer to buy or sell (buy or sell offers) a point-to-point transmission of electric energy on a network (electric grid). (see abstract; col. 2, lines 19 - 67);

(b) for said received offer, determining if an acceptance of the said received offer would violate at least one transmission constraint (transmission capacity or import/export limits) for a component of said network (electric grid interface). (see col. 2, lines 49 – 61; col. 4, line 60 – col. 5, line 15);

(c) for said received offer, whose acceptance would violate at least one transmission constraint (differences between import and export limits) for a network component (electric grid interface), calculating, for at least one violated (limit exceeds import/export limit) transmission constraint for a network component (electric grid interface), and for at least one other point-to-point transmission right which utilizes the said network component (export/import interface), a quantity exchange rate (transfer capability) for the said network component between said received offer (import), and the said other right (export). (see col. 4, line 60 – col. 5, line 15);

(d) for said received offer, whose acceptance would violate at least one transmission constraint (import/export limits) for a network component, wherein the portion (exceeding the import/export limit) is calculated based upon an amount by which the transmission constraint would be violated by the acceptance of said received offer (the more restrictive limitation), and further based upon the said quantity exchange rate (unused transfer capability) between the said received offer (import) and the said other right (export) for the said constrained network component (electric grid interface). (see col. 4, line 60 – col. 5, line 15);

- updating data to reflect changes in the state of the network (see col. 2, lines 4 – 41 – displaying real-time information implies that the data is being updated, as it would otherwise not be real-time information);

- wherein constraints (unused transfer capability) on transmission are determined based on a database of existing trades. (see col. 5, lines 1 – 15; col. 18, lines 44 – 68); and
- wherein the step of recording includes updating a set of rights (unused transmission capacity) held by each market participant and trades made for settlement purposes. (see col. 2, lines 28 – 67; col. 4, line 60 – col. 5, line 15).

Tuck does not explicitly teach a method wherein a market participant offers to buy or sell a point-to-point transmission **right** on a network. (emphasis added).

However, Examiner asserts that as Tuck discloses a method wherein a market participant offers to buy or sell a point-to-point transmission of electric energy on a network, and said transmission implies a right to transmit upon said network.

Tuck does not teach a method wherein the quantity exchange rate is calculated using a **Power Transfer Distribution Function (PTDF) matrix**, and is based upon a ratio of the **PTDF matrix elements** for the said received offer and the said other right for the said constrained network component. (emphasis added). However, while Tuck does not teach utilizing a Power Transfer Distribution Function matrix, Tuck does disclose a function that monitors the power transfer distribution throughout the network ensuring against a network overload. (see col. 2, lines 49 – 61). Furthermore, Tuck discloses that the calculations are based upon a ratio of two elements of the system, the ratio between the import and export interfaces. (see col. 4, line 60 – col. 5, line 15).

Tuck does not teach a method wherein for said received offer, whose acceptance would violate at least one transmission constraint for a network component, permitting a portion of said other right to be purchased, and permitting the said received offer to be accepted, upon the said portion of said other right being purchased; updating the PTDF to reflect changes in the state of the network for use in calculating future exchange rates; presenting to other participants the said received offer made by the said at least one market participant to buy or sell a new point-to-point transmission right, the presenting offer including a price and a quantity adjusted based on at least one calculated exchange rate; further limiting trades in transmission rights to a specified subset of rights, so as to permit electrical transmission to be transferred from a location to or from a defined hub or node; further including accounting for new transmission constraints, in response to an introduction of new transmission constraints that reflect changes in transmission systems or other contingencies, in a set of existing constraints used in calculating quantity exchange rates between offers to buy and sell transmission rights. (emphasis added).

Hogan discloses a method:

- a market participant offers to buy or sell a point-to-point transmission right (flowgate right) on a network. (see p. 6);
- wherein the quantity exchange rate is calculated using a Power Transfer Distribution Function (PTDF) matrix, and is based upon a ratio of the PTDF matrix elements for the received offer and the said other right for the said constrained network component. (see pp. 2 – 4, especially p. 4);

- whose acceptance (transaction) would violate at least one transmission constraint for a network component, permitting a portion of said other right to be purchased (purchase the appropriate number of flowgate rights), and permitting the said received offer to be accepted, upon the said portion of said other right being purchased. (pp. 15 – 16);
- updating the PTDF to reflect changes in the state of the network (changes to configuration of grid) for use in calculating future exchange rates. (see p. 28; p. 33);
- presenting to other participants the said received offer made by the said at least one market participant to buy or sell a new point-to-point transmission right (flowgate right), the presenting offer including a price (value of flowgate right) and a quantity (number of flowgate rights) adjusted based on at least one calculated exchange rate (credits in both directions on every flowgate). (see pp. 15 – 16).
- further limiting trades in transmission rights (flowgate rights) to a specified subset of rights, so as to permit electrical transmission to be transferred from a location to or from a defined hub or node. (see p. 6); and
- further including accounting for new transmission constraints (via changing values in PTDF tables), in response to an introduction of new transmission constraints that reflect changes in transmission systems or other contingencies (grid configuration), in a set of existing constraints

used in calculating quantity exchange rates between offers to buy and sell transmission rights. (see p. 28).

It would have been obvious to one of ordinary skill at the time the invention was made to have modified Tuck by incorporating the ability to buy or sell transmission rights, as disclosed by Hogan, allowing for those participants with a surplus (or a deficit) of transmission rights the ability to sell excessive (or secure needed) transmission rights, allowing for an effective and efficient electrical energy transmission marketplace.

Regarding Claim 35, such claim recites substantially similar limitations as claimed in previously rejected claims, specifically portions of Claim 34. Such claim limitations are therefore rejected using the same art and rationale as previously utilized.

Response to Arguments

Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON M. BORLINGHAUS whose telephone number is (571)272-6924. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on (571) 272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3693

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A. Kramer/
Supervisory Patent Examiner, Art Unit 3693

/Jason M Borlinghaus/
Primary Examiner, Art Unit 3693

April 10, 2008